AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims

1-49. (Cancelled)

50. (Currently amended) An isolated and purified peptide ~~having~~ consisting of an amino acid sequence homologous to an amino acid sequence of a domain of a pyrogenic exotoxin which domain forms a central turn in the exotoxin starting within β-strand 7 and connecting the β-strand 7, via short β-strand 8, to α-helix 4, and ending within α-helix 4, based on the domain numbering of SEB, wherein said isolated peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

51. (Previously presented) The isolated and purified peptide of Claim 50 wherein the amino acid sequence of said peptide is homologous to amino acids 150-161 of *Staphylococcus aureus* enterotoxin B (SEQ. ID NO.: 1).

52. (Previously presented) The peptide of Claim 50 or 51, wherein said peptide is dimerized.

53. (Previously presented) The peptide of Claim 50 or 51, wherein said peptide is multimerized.

54. (Previously presented) The peptide of Claim 53, wherein said peptide is trimerized.

55. (Previously presented) The peptide of Claim 50 or 51, wherein said peptide is conformationally constrained.

56. (Previously presented) The peptide of Claim 55, wherein said peptide is cyclized.

57. (Previously presented) The peptide of Claim 50 or 51 further comprising an N-terminal lauryl-cysteine (LC) and/or a C-terminal cysteine.

58. (Previously presented) The peptide of Claim 50 or 51 further comprising an N-terminal and C-terminal cysteine.

59. (Previously presented) The peptide of Claim 58 wherein the peptide comprises an intramolecular disulfide bridge.

60. (Previously presented) The peptide of Claim 50 or 51, further comprising an N-terminal and a C-terminal D-amino acid residue.

61. (Previously presented) The peptide of Claim 60, wherein the D-amino acid is D-alanine.

62. (Previously presented) The peptide of Claim 50 or 51, comprising an N-terminal acetyl group.

63. (Previously presented) The peptide of Claim 62, further comprising a C-terminal D-amino acid residue.

64. (Previously presented) The peptide of Claim 63, wherein the D-amino acid is D-alanine.

65. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 1 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

66. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 2 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

67. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 3 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

68. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 4, wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

69. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 5 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

70. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 6 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

71. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 7 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

72. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 8 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

73. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 9 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

74. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 10 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

75. (Currently Amended) An isolated peptide ~~having~~ consisting of the amino acid sequence of SEQ. ID NO.: 11 wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes.

76. (Previously presented) A composition which inhibits pyrogenic exotoxin-mediated activation of T-lymphocytes comprising an isolated and purified peptide having an amino acid sequence homologous to an amino acid sequence of a domain of a pyrogenic exotoxin which domain forms a central turn in the exotoxin starting within β-strand 7 and connecting the β-strand 7, via short β-strand 8, to α-helix 4, and ending within α-helix 4, based on the domain numbering of SEB, wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, in an amount effective to inhibit exotoxin-induced expression of an RNA encoded by the IL-2, IFN-γ and/or TNF-β genes, and a carrier.

77. (Previously presented) The composition of Claim 76, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 1, SEQ. ID NO.: 2, SEQ. ID NO.: 3, SEQ. ID NO.: 4, SEQ. ID NO.: 5, SEQ. ID NO.: 6, SEQ. ID NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10, and SEQ. ID NO.: 11.

78. (Previously presented) The composition of Claim 76, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 2, SEQ. ID NO.: 6, SEQ. ID NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10 and SEQ. ID NO.: 11.

79. (Previously presented) The composition of Claim 76, wherein the peptide has the sequence of SEQ. ID NO.: 2.

80. (Previously presented) An immunogenic composition for eliciting antibodies that block pyrogenic exotoxin mediated activation of T-lymphocytes comprising an isolated and purified peptide having an amino acid sequence homologous to an amino acid sequence of a domain of a pyrogenic exotoxin which domain forms a central turn in the exotoxin starting within β-strand 7 and connecting the β-strand 7, via short β-strand 8, to α-helix 4, and ending within α-helix 4, based on the domain numbering of SEB, wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, in an amount effective to elicit said antibodies, and a carrier.

81. (Previously presented) The immunogenic composition of Claim 80, further comprising an adjuvant selected from the group consisting of proteosomes, KLH, alum and mixtures thereof.

82. (Previously presented) The immunogenic composition of Claim 80, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 1, SEQ. ID NO.: 2, SEQ. ID NO.: 3, SEQ. ID NO.: 4, SEQ. ID NO.: 5, SEQ. ID NO.: 6, SEQ. ID NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10 and SEQ. ID NO.: 11.

83. (Previously presented) The immunogenic composition of Claim 80, wherein the peptide has a sequence selected from the group consisting of SEQ. ID NO.: 2, SEQ. ID NO.: 6, SEQ. ID NO.: 7, SEQ. ID NO.: 8, SEQ. ID NO.: 9, SEQ. ID NO.: 10 and SEQ. ID NO.: 11.

84. (Previously presented) The immunogenic composition of Claim 80, wherein the peptide has the sequence of SEQ. ID NO.: 2.

85. (Previously presented) An immunogenic composition for eliciting protective immunity against toxic shock comprising an isolated and purified peptide having an amino acid sequence homologous to an amino acid sequence of a domain of a pyrogenic exotoxin which domain forms a central turn in the exotoxin starting within β-strand 7 and connecting the β-strand 7, via short β-strand 8, to α-helix 4, and ending within α-helix 4, based on the domain numbering of SEB, wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, in an amount effective to elicit said protective immunity, and a carrier.

86. (Previously presented) The composition of claim 76 wherein said peptide has an amino acid sequence homologous to the amino acid sequence of amino acids 150-161 of *Staphylococcus aureus* enterotoxin B (SEQ ID NO:1).

87. (Previously presented) The immunogenic composition of claim 80 wherein said peptide has an amino acid sequence homologous to the amino acid sequence of amino acids 150-161 of *Staphylococcus aureus* enterotoxin B (SEQ ID NO:1).

88. (Currently Amended) An isolated and purified peptide ~~having~~ consisting of an amino acid sequence $KXaa_{(3)}TXaaQEXaaD$ (SEQ ID NO:13) wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, wherein Xaa is an amino acid.

89. (Currently Amended) An isolated and purified peptide ~~having~~ consisting of an amino acid sequence $KKXaa_{(6)}LD$ (SEQ ID NO:14) wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, wherein Xaa is an amino acid.

90. (Currently Amended) An isolated an purified peptide ~~having~~ consisting of an amino acid sequence charged amino acid-$Xaa_{(2)}$-hydrophobic amino acid- Xaa -hydrophobic amino acid-polar amino acid-polar amino acid-hydrophobic amino acid-D (SEQ ID NO:15), wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, and wherein Xaa is an amino acid.

91. (Currently Amended) An isolated and purified peptide ~~having~~ consisting of an amino acid sequence $Xaa_{(2)}KXaa_{(3)}TXaaQEXaaD$ (SEQ ID NO:16) wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, wherein Xaa is an amino acid.

92. (Currently Amended) An isolated and purified peptide ~~having~~ consisting of an amino acid sequence $Xaa_{(2)}KKXaa_{(6)}LD$ (SEQ ID NO:17) wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, wherein Xaa is an amino acid.

93. (Currently Amended) An isolated an purified peptide ~~having~~ consisting of an amino acid sequence $Xaa_{(2)}$-charged amino acid-$Xaa_{(2)}$-hydrophobic amino acid- Xaa -hydrophobic amino acid-polar amino acid-polar amino acid-hydrophobic amino acid-D (SEQ ID NO:18), wherein said peptide does not have toxin agonist activity and is capable of antagonizing toxin-mediated activation of T lymphocytes, and wherein Xaa is an amino acid.

94. (Previously presented) The peptide of claim 88, wherein the peptide is capable of eliciting antibodies that block pyrogenic exotoxin-mediated activation of T-lymphocytes.

95. (Previously presented) The peptide of claim 89, wherein the peptide is capable of eliciting antibodies that block pyrogenic exotoxin-mediated activation of T-lymphocytes.

96. (Previously presented) The peptide of claim 90, wherein the peptide is capable of eliciting antibodies that block pyrogenic exotoxin-mediated activation of T-lymphocytes.

97. (Previously presented) The peptide of claim 91, wherein the peptide is capable of eliciting antibodies that block pyrogenic exotoxin-mediated activation of T-lymphocytes.

98. (Previously presented) The peptide of claim 92, wherein the peptide is capable of eliciting antibodies that block pyrogenic exotoxin-mediated activation of T-lymphocytes.

99. (Previously presented) The peptide of claim 93, wherein the peptide is capable of eliciting antibodies that block pyrogenic exotoxin-mediated activation of T-lymphocytes.